

CHAPTER 4

SECTION 4.1

NUCLEAR MEDICINE

ISSUE DATE: June 30, 1993

AUTHORITY: [32 CFR 199.4\(b\)\(2\)\(vii\)](#) and [\(c\)\(2\)\(ix\)](#)

I. CPT¹ PROCEDURE CODE RANGE

78000 - 79999

II. DESCRIPTION

Nuclear Medicine uses very small amounts of radioactive materials or radiopharmaceutical to diagnose and treat disease. Radiopharmaceuticals are substances that are attracted to specific organs, bones, or tissues. The radiopharmaceutical used in nuclear medicine emit gamma rays that can be detected externally by gamma or PET cameras. These cameras work in conjunction with computers used to form images that provide data and information about the area of body being imaged. The following techniques are used in the diagnosis, management, treatment, and prevention of disease: (1) Planar, Single Photon Emission Computerized Tomography (SPECT); (2) Positron Emission Tomography (PET); (3) Tomography; (4) Nuclear Medicine Scan; (5) Radiopharmaceutical; (6) Gamma Camera; (7) In Vitro done in test tubes; and (8) In Vitro done in patients.

III. POLICY

A. Positron emission tomography (PET) is covered for:

1. The diagnosis and management of seizure disorders.
2. Evaluation of ischemic heart disease.
3. The diagnosis and management of lung cancer.
4. PET scans for other indications are covered when reliable evidence supports that the use of PET is safe, effective and comparable or superior to standard care (proven).

B. Single Photon Emission Computed Tomography (SPECT) is covered for:

1. Myocardial perfusion imaging utilizing SPECT.

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2. Brain imaging utilizing SPECT for the evaluation of seizure disorder.
 3. Prostatic radioimmunoscintigraphy imaging utilizing SPECT for the following indications:
 - a. Metastatic spread of prostate cancer and for use in post-prostatectomy patients in whom there is a high suspicion of undetected cancer recurrence.
 - b. Newly diagnosed patients with biopsy-proven prostate cancer at high risk for spread of their disease to pelvic lymph nodes.
 4. Indium-1111 - for detecting the presence and location of myocardial injury in patients with suspected myocardial infarction.
 5. Indium-111-labeled anti-TAG72 for tumor recurrence in colorectal and ovarian cancer.
 6. SPECT for other indications when reliable evidence supports that the use of SPECT is safe, effective, and comparable or superior to standard care (proven).
- C. Bone density (bone mineral content) studies (CPT² procedure codes 78350, 78351) are covered for:
1. The diagnosis and monitoring of osteoporosis.
 2. For the diagnosis and monitoring of osteopenia.
 3. Patients must present with signs and symptoms of bone disease or be considered at high-risk. The following are considered high risk:
 - a. Women who are estrogen-deficient and at a clinical risk of or osteoporosis.
 - b. Individuals who have vertebral abnormalities.
 - c. Individuals receiving long-term glucocorticoid (steroid) therapy.
 - d. Individuals with primary hyperparathyroidism.
 - e. Individuals with positive family history of osteoporosis.

IV. EXCLUSION

Routine screening for osteoporosis is excluded.

- END -

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